

7 first group is positioned adjacent to a bus conductor of the second group that is positioned
8 adjacent to yet another bus conductor of the first group, and so on for each of the plurality
9 of bus conductors, the transmission line impedance of any pair of adjacent bus conductors,
10 one being chosen from the first group and the other being chosen from the second group,
11 being determinable, wherein each of the bus conductors of the first group are adapted to be
12 electrically coupled to respective signal paths associated with a circuit board on which the
13 connector is to be mounted through only two electrical contact elements regardless of the
14 number of compliant contact regions, the two electrical contact elements of each bus
15 conductor of the first group being arranged so that each is disposed substantially near an
16 end of its respective bus conductor, and the bus conductors of the second group each being
17 adapted to be electrically coupled to an electrical ground plane associated with the circuit
18 board through a number of electrical contact elements disposed along their respective
19 lengths, the number of electrical contact elements being irrespective of the number of
20 compliant contact regions.

Please amend the remaining claims as follows.

1 2. (Amended) A [socket] connector as in claim [1] further comprising] 36 wherein a
2 dielectric spacer is disposed between [said first and second conductors] each adjacent bus
3 conductor of the first and second groups.

1 4. (Amended) A [socket] connector as in claim [3] 36 wherein said compliant contact
2 regions of said [first and second] bus conductors are made of a Beryllium-Copper (Be-Cu)
3 alloy.

1 5. (Amended) A [socket] connector as in claim [3] 36 wherein said compliant contact
2 regions of said [first and second] bus conductors comprise [an] elastomer-backed metal
3 [region] regions.

Continued

3.
1 6. (Amended) A [socket] connector as in claim 2 wherein said compliant contact
2 regions of said [first and second] bus conductors comprise fingers offset from [said]
3 respective ones of said bus conductors through a bend.

8.
1 9. (Amended) A [socket] connector as in claim [1] 36 wherein [said] the compliant
2 contact regions of [said first conductor] bus conductors of the first group are arranged to
3 contact [a lead disposed on] a first side of [a circuit element] the electrical devices and [said]
4 the compliant contact regions of [said second conductor] bus conductors of the second
5 group are arranged to contact a [lead disposed on a] second side of [said circuit element] the
6 electrical devices.

6.
1 10. (Amended) A connector as in claim [14] 4 further comprising a dielectric spacer
2 disposed between [said first and second conductors] each adjacent bus conductor of the
3 first and second groups.

9.
1 11. (Amended) A connector as in claim [13] 9 wherein [said] the compliant contact
2 regions of [said] the bus conductors are made of a Beryllium-Copper (Be-Cu) alloy.

10.
1 12. (Amended) A connector as in claim [13] 9 wherein [said] the compliant contact
2 regions of [said] the bus conductors comprise elastomer-backed metal regions.

11.
1 13. (Amended) A connector as in claim [14] 9 wherein [said] the compliant contact
2 regions of [said first and second] the bus conductors comprise fingers offset from [said]
3 respective ones of the bus conductors through a bend.

12.
1 20. (Amended) A [circuit board] connector as in claim [19] 36 wherein [said electrical
2 channel comprises] the signal paths comprise a plurality of traces on the circuit board.

13.

1 2~~b~~. (Amended) A [circuit board] connector as in claim [21] ~~20~~ wherein [said] the
2 compliant contact regions of [said] the bus conductors comprise fingers offset from [said]
3 respective ones of the conductors through a bend.

14.

1 2~~b~~. (Amended) A [circuit board] connector as in claim [21] ~~20~~ wherein [said] the
2 compliant contact regions of [said] the bus conductors comprise elastomer-backed metal
3 regions.

4.

1 2~~b~~. (Amended) A connector as in claim [27] ~~2~~ wherein said compliant contact regions
2 comprise elastomer-backed metal regions.

15.

1 3~~b~~. (Amended) A [socket] connector as in claim [30] ~~36~~ wherein said electrical contact
2 elements of said bus conductors of the first group [conductive signal bar] comprise metal
3 posts [disposed near the ends of said conductive signal bar].

16.

1 3~~b~~. (Amended) A [socket] connector as in claim ~~31~~ wherein said electrical contact
2 elements of said [ground bar] bus conductors of the second group comprise metal posts
3 [disposed so as to electrically couple said ground bar to said reference region at a plurality
4 of positions throughout the length of said ground bar].

17.

1 3~~b~~. (Amended) A [socket] connector as in claim ~~32~~ wherein said metal posts of said
2 [ground bar] bus conductors of the second group are disposed at approximately equal
3 intervals over the [length] lengths of each of said [ground bar] bus conductors of said
4 second group.